

CLAIMS

What is claimed is:

1. A plastisol composition, comprising a poly(vinyl chloride) polymer, at least one plasticizer, and an infrared-reflective pigment.
2. A plastisol composition according to claim 1, wherein the poly(vinyl chloride) polymer is a poly(vinyl chloride) homopolymer.
3. A plastisol composition according to claim 1, wherein the composition comprises at least one plasticizer selected from the group consisting of phthalates, azelates, butyrates, and epoxy plasticizers.
4. A plastisol composition according to claim 1, wherein the composition comprises a secondary plasticizer.
5. A plastisol composition according to claim 1, wherein the composition comprises 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate.
6. A plastisol composition according to claim 1, wherein the composition comprises a sufficient amount of the infrared-reflective pigment so that there is essentially no transmittance of light of near infrared wavelength through a coating layer of a desired thickness formed from the plastisol composition.

7. A film prepared by applying to a substrate a plastisol composition comprising a poly(vinyl chloride) polymer, at least one plasticizer, and an infrared-reflective pigment and coalescing the applied composition to produce the film.
8. A film according to claim 7, wherein the film contains a sufficient amount of the infrared-reflective pigment so that there is essentially no transmittance of light of near infrared wavelength through the film.
9. A film according to claim 7, wherein the film is from about 1 mil to about 20 mils thick.
10. A film according to claim 7, wherein the film is flexible.
11. An article of architectural siding, comprising an outer coating layer comprising a poly(vinyl chloride) polymer, at least one plasticizer, and an infrared-reflective pigment.
12. An article of architectural siding according to claim 11, wherein the coating layer is from about 1 mil to about 20 mils thick.

13. An article of architectural siding according to claim 11, wherein the article of architectural siding is a vinyl article.

14. An article of architectural siding according to claim 11, wherein the article of architectural siding is an aluminum article.

15. A method of preparing an article of architectural siding, comprising steps of:

(a) forming a coating layer on a backing material by applying to the backing material a layer of a plastisol composition comprising a poly(vinyl chloride) polymer, at least one plasticizer, and an infrared-reflective pigment and fusing the applied plastisol layer into a coating layer with heat;

(b) removing the coating layer from the backing material and laminating the coating layer to a piece of architectural siding material; and

(c) shaping the piece of laminated architectural siding material into a desired profile.

16. An article of architectural siding formed according to the method of claim 15.

17. An article of architectural siding according to claim 16, wherein the article of architectural siding is a vinyl article.

18. An article of architectural siding according to claim 16, wherein the article of architectural siding is an aluminum article.

19. A coated article, comprising at least one coating layer comprising a poly(vinyl chloride) polymer, at least one plasticizer, and an infrared-reflective pigment.

20. An article having thereon a layer of a plasticized poly(vinyl chloride) polymer, the layer further including an infrared reflective pigment.

21. An article according to claim 21, wherein the article is a piece of vinyl siding or a trim piece for vinyl siding and the layer is an outer layer from about 2 mils to about 5 mils thick.

22. A method of protecting a building, comprising applying to the exterior of the building articles of architectural siding having an outer layer of a coating comprising an infrared reflective pigment.

23. A method according to claim 22, wherein the coating further comprises a poly(vinyl chloride) polymer and at least one plasticizer.